Bureau of Land Management

Arizona Strip Field Office

Environmental Assessment

Muggins Flat Allotment Grazing Permit Renewal

EA-AZ-110-2005-0071

I. INTRODUCTION

This Environmental Assessment (EA) analyzes the proposed grazing permit renewal for the Muggins Flat allotment. The action culminates an evaluation conducted on the allotment under the Arizona BLM Standards for Rangeland Health and Guidelines for Grazing Management (S&Gs). In addition, this EA looks at the present Allotment Management Plan (AMP), and determines if current grazing management practices would maintain desirable conditions and continue to allow improvement of public land resources, or if changes in grazing management for the allotment are necessary. This EA is intended to evaluate the findings of the Muggins Flat allotment assessment as it relates to vegetation conditions and resource values in the allotment. This is done in an effort to balance demands placed on the resources by various authorized uses within the allotment.

Analysis of existing allotment data indicates that ecological condition trends and pace-frequency trends are mostly static. It was determined by the Interdisciplinary Assessment Team (IAT) during the assessment process, that resource conditions on the allotment are meeting Standards for Rangeland Health.

Purpose and Need

The purpose and need of this action is to renew the grazing permit for the Muggins Flat (#5313) allotment. This allotment is located in Coconino County near Fredonia, Arizona on lands managed by the Arizona Strip Field Office.

Conformance with Land Use Plan

The proposed action and alternatives described below are consistent with the Arizona Strip District Resource Management Plan (RMP) dated January 31, 1992, as amended April 1997, and are consistent with Federal, State and local laws, regulations, and plans to the maximum extent possible. Rangeland management was considered in the Vermillion Grazing EIS of 1979, which was subsequently adopted as management direction in the Arizona Strip District RMP of 1992 (I-1).

Relationships to Statutes, Regulations, or other Plans

This action is in conformance with Arizona's Standards and Guides, which were developed through a collaborative process involving the Arizona Resource Advisory Council and the Bureau of Land Management State Standards and Guidelines team. The Secretary of the Interior approved the Standards and Guidelines in April 1997. The Decision Record, signed by the BLM Arizona State Director (April 1997) provided for full implementation of the Standards and Guides in all Arizona BLM Land Use Plans

Grazing permit renewals are also provided for in 43 CFRs 4100 where the objectives of regulations are"....to promote healthy, sustainable rangeland ecosystems; to accelerate restoration and improvement of public rangelands to properly functioning conditions; to promote the orderly use,....; to establish efficient and effective administration of grazing of public rangelands;....", and as provided for in the Land Use Plans in accordance with multiple-use objectives, requirements and provisions of established laws, regulations and BLM policies incorporating Desired Plant Community (DPC) objectives using the Ecological Site Index approach.

Grazing management practices of the Muggins Flat AMP are in conformance with Arizona Standards for Rangeland Health and Guidelines for Grazing Administration. These practices are intended to assist management in meeting the Standards for Rangeland Health.

Renewal of the Muggins Flat grazing permit conforms to the President's National Energy Policy and would not have adverse energy impacts. This action would not deny energy projects, withdraw lands, close roads or in any other way deny or limit access to mineral materials to support energy actions.

Issues raised relating to Standards for Rangeland Health

The issues relating to rangeland health were identified by the Rangeland Resources Team (RRT), Interdisciplinary Assessment Team (IAT), and livestock permittee during the allotment scoping meeting. Conclusions to these issues can be found in Standards and Guidelines Assessment Reports. The issues identified through the process described above were:

Scoping meeting March 14, 2001.

- OHV activity near the northeast key area
- Lack of understory vegetation in the sagebrush
- Moderate concerns about soil erosion in bottoms

Current Planning Process

The Arizona Strip District Office is currently involved in a planning process that will result in 3 stand alone RMPs, one for each new National Monument and one for the Public Domain on the Strip outside of the monuments. No grazing changes are currently anticipated for the aforementioned allotment. However, there may be modifications as a result of the new RMPs.

The 10- year grazing permit, in part, states "This permit is subject to (A) modification, suspension or cancellation as required by land plans and applicable law; (B) annual review and to modification of terms and conditions as appropriate; …". BLM may use these permit conditions to implement any changes required under the new RMPs.

II. PROPOSED ACTION AND ALTERNATIVES

Proposed Action (Renewal of 10 Year Grazing Permit)

The Proposed Action is to renew the grazing permit for the Muggins Flat allotment and respective grazing AMP for a period of ten years with current terms and conditions. Renewal of the 10 year grazing permit proposes no change from the present grazing permits. Livestock numbers would be limited to the current active preference. Livestock grazing would be in accordance with the existing AMP. New range improvements to assist in grazing practices and promote rangeland health would be considered through the NEPA process.

Alternatives Considered But Rejected For Further Analysis

Alternatives are tiered to the Arizona Strip District RMP (January, 1992) and the Vermillion Grazing EIS of 1979 which was adopted into the RMP and are basically the same for this action. The Grazing EIS addressed four alternatives: No Action, Elimination of Grazing on Public Lands, Stocking Level by Condition Class, Grazing and Benefit/Cost.

The following three alternatives were considered for this EA but rejected because they were analyzed in the RMP, to which this document is tiered.

- **Stocking Level by Condition Class alternative** would set the stocking level in relation to the average condition and apparent trend of the allotment.

- **Benefit/cost alternative.** The proposed 1,600 acre sagebrush treatment on the Muggins Flat allotment would need to be reduced to 700 acres to make benefit/cost ratios equal to or greater than 1, which is what was considered cost effective in the EIS. Though no specific acreage is identified for the sagebrush reduction discussed in the Muggins Flat Allotment S&G Assessment or in this EA, approximately 700 acres of sagebrush would be treated.

- **Elimination of Livestock Grazing on Public Lands**. The decision to authorize livestock grazing in this area is documented in the approved land use plan. Absent of any new information indicating that continued livestock grazing would preclude BLM from either achieving or making significant progress toward achieving established land health standards, the land use plan decision authorizing grazing remains' valid. Since an alternative of no grazing or not renewing a grazing permit would not conform to the land use plan, a plan amendment would be required prior to closing an allotment to livestock grazing.

The grazing system as identified in the Muggins Flat AMP

A modified three pasture deferred rotation grazing system is used. The allotment is used from December 1 to March 31. By using this system, all three pastures will be rested through the growing season every year. This is intended to especially benefit cool season species through spring rest every year.

Grazing Preference and Current Use on the Allotments

Allotment Name	# Livestock	Period of Use	% Federal Range	Active AUMs
Muggins Flat	88 Horses	12/1-3/31	87	305

Terms and Conditions of Grazing Permits

Grazing is in accordance with the Muggins Flat AMP. Billing for grazing use is based on the actual use report which is submitted to BLM by the grazing permittee at the end of the period of use each year.

Desired Plant Community (DPC)

This EA also incorporates by reference the "Implementation of Standards for Rangeland Health and Guidelines for Grazing Administration, Muggins Flat Allotment S&G Assessment."[1] This allotment assessment lists and evaluates achievement of the allotments DPC objectives, expressed in terms of species composition by weight, as summarized below.

Well Pasture Key area #1 Shallow Loamy 10 to 14 inch pz

- Maintain perennial grasses between 1 - 10 percent composition by weight and annual grasses below 35 percent composition by weight.
- Maintain forbs between 10 and 30 percent composition by weight.
- Maintain shrubs between 50 and 60 percent composition by weight.

Johnson Reservoir Pasture Key area #1 Shallow Loamy 10 to 14 inch pz

- Maintain perennial grasses about 10 percent composition by weight and annual grasses below 25 percent composition by weight.
- Maintain forbs between 5 and 10 percent composition by weight.
- Maintain shrubs between 60 to 70 percent composition by weight.

Muggins Wash Pasture Key area #1 Shallow Loamy 10 to 14 inch pz

- Maintain grasses between 10 and 15 percent composition by weight.
- Maintain forbs between 1 to 5 percent composition by weight.

[1] Muggins Flat Allotment S&G Assessment, available at the Bureau of Land Management, Arizona Strip Field Office, 345 E. Riverside Drive, St. George, Utah 84790.

- Maintain shrubs between 75 and 95 percent composition by weight.

Muggins Wash Pasture Key area #2 Loamy Upland 10 to 14 inch pz
- Maintain grasses between 25 and 35 percent composition by weight.
- Maintain shrubs between 65 and 75 percent composition by weight.

Monitoring

The goals of monitoring are to determine if the fundamentals or conditions of Rangeland Health are being met within the AMP area under 43 CFR 4180. These conditions of Rangeland Health are:

> (a) Watersheds are in, or are making significant progress toward, properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and land form and maintain or improve water-quality, water quantity, and timing and duration of flow.
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> (b) Ecological processes, including the hydrologic cycle, nutrient cycle, and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.
>
> (c) Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established BLM management objectives such as meeting wildlife needs.
>
> (d) Habitats are, or are making significant progress toward being restored or maintained for Federal threatened and endangered species, Federal Proposed, Category 1 and 2 Federal candidate and other special status species.

To monitor rangeland health conditions, key areas as defined in the *Monitoring* "Planning for Monitoring", "TR 4400-1", (1984) would be used. The key area would be used as an indicator area to reflect what is happening on the terrain they represent, subsequent of on-the-ground management. Each key area would be established based on a Range Site/Ecological Site (developed by the Natural Resource Conservation Service, (NRCS) with a specific Potential Natural Community (PNC) and specific physical site characteristics. Knowing the PNC of the area, and using the ecological site descriptions as a guide, DPC objectives can be developed. The DPC then becomes the objectives by which management actions would be measured.

Dry Weight Ranking (DWR) studies would be used to measure attainment of the key area DPC objectives. In addition, Pace Frequency studies would be used at each key area to detect changes of individual species which determines a trend or change in vegetation composition. Pace Frequency and DWR would be completed on each key area every 3-6 years. DWR and Pace Frequency study methodologies are described in *Sampling Vegetation Attributes*, "Interagency

Technical Reference 1734-4" (1996).

Livestock use on forage plants would be determined by conducting grazing utilization studies using the Grazed-Class Method as described in the *Utilization Studies and Residual Measurements* "Interagency Technical Reference 1734-3" (1996). Utilization studies would be completed annually by BLM, when livestock are removed from the pasture. Study data would be compiled each year. Other information to be collected and compiled is precipitation, actual use, etc. All monitoring data would be used to evaluate current management and assist BLM in making management decisions that helps achieve vegetation objectives on the allotment.

Based on analyses of allotment monitoring data and supporting documentation contained in the Muggins Flat S&G Assessment Report, resource conditions on the allotment meets all applicable standards for rangeland health.

III. AFFECTED ENVIRONMENT

The affected environment is tiered to the Arizona Strip District RMP (January 31, 1992), Affected Environment pages III-1 to III-58, and pages 2-1 to 2-47 of the Vermillion Grazing EIS (1979) which was adopted into the RMP and are essentially the same for this action. Chapter 2 of the Vermillion Grazing EIS describes the environmental components likely to be impacted by the proposed action. Environmental components discussed in the EIS that might affect or be affected by the proposal are: Climate, Vegetation, Threatened or Endangered (Wildlife) Species, Riparian Vegetation, Soils, Water Resources, Animals (wildlife), Cultural Resources, Visual Resources, and Land Uses including livestock grazing and recreation.
This EA also incorporates by reference the "Implementation of Standards for Rangeland Health and Guidelines for Grazing Administration, Muggins Flat Allotment S&G Assessment."[2] The introduction, grazing use, and allotment profile sections in the S&G Assessment describes the resources and issues applicable to the allotment areas. Also, see the S&G Assessment Appendices for other resource data and associated information.

Climate

Precipitation in the vicinity of the allotment is very erratic, both in area and in occurrence. Readings taken from 2 rain gauges less than 3 miles apart, at similar elevation, show ~1 inch difference in average annual precipitation. Average annual precipitation at the Winter Road rain gauge--which is in the proximity of the Muggins Flat allotment--is ~11 inches, and has varied from ~7 to ~14 inches over a 20 year period. Approximately 17% of the annual precipitation comes in the fall, 30% in comes in winter, 21% comes in spring, and 32% comes in summer. Average Fahrenheit temperatures range from the 30's in winter to the 80's in summer. Due to low humidity and high summertime temperatures, the potential evaporation rate is about 18 inches for every inch of precipitation.

[2] Ibid.

Vegetation

Sagebrush is the principal vegetative type[3] within the allotment.

- The sagebrush type includes big sagebrush, squirrel tail, blue grama, galleta, sand dropseed, Mormon tea and cliffrose.

This vegetative type makes up the different ecological sites[4] that are part of the Major Land Resource Units, as defined by the NRCS. The two ecological sites on the allotment are: Shallow Loamy and Loamy Upland.

Water Sources

Water is supplied to the allotment through pipelines connected to the Muggins Flat Well. Also, ephemeral ponds supply part of the water needs, with the permittee hauling water to supplement any shortfall.

All of the above artificial water sources are available to wildlife, although some of them may not actually hold water yearlong. All of the water rights are held by the permittee. It is a requirement of the agreements to make the water accessible to wildlife, for the time that water is available. There is currently no known competition for water between wildlife and livestock at the artificial sources.

Threatened or Endangered (T/E) Species

Bald eagle (*Haliaeetus leucocephalus*), California condor (*Gymnogyps californianus*), and peregrine falcon (*Falco peregrius alatum*) may occasionally fly over the allotment. There are no riparian areas that would provide foraging habitat for peregrine falcon, bald eagle, or southwestern willow flycatcher (*Empidonax trailii extimus*). An experimental non-essential population (as defined under section 10J of the Endangered Species Act) of California condors was established on the Vermillion Cliffs in 1996. These birds may eventually forage on carrion within the allotment but have not yet been observed doing so. No other federally listed, proposed, or candidate T/E plant or animal species are known to occur in the area covered by this EA.

BLM Sensitive and State Species of Concern

Ferruginous hawks (*Buteo regalis*) are known to forage over grassland habitat similar to that found on the allotment, though specific sightings have not been recorded for the area. Black-

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[3] Vermillion Grazing Environmental Impact Statement

[4] An ecological site is a distinctive kind of land that differs from other kinds in its ability to produce a characteristic plant community. Each ecological site is a product of all environmental factors responsible for its development. Each site is capable of producing and supporting a plant community typified by an association of species that differs from other ecological sites in species kind, proportion and total production.

crowned night Heron (*Nysticorax nycticorax hoactli*) and snowy egrets (*Egretta thula brewsteri*) have occasionally been observed using stock tanks in the area, but have not been recorded on the allotment. A variety of sensitive bat species have been captured on this and neighboring allotments including Townsend's big-eared (*Corynorhinus townsendii*), spotted bats (*Euderma maculatum*), small-footed myotis (*Myotis ciliolabrum*), fringed myotis (*Myotis thysanodes*), and big free-tailed bats (*Nyctinomops macrotis*).

Wildlife

Pronghorn antelope (*Antilocapra americana*) have recently migrated to the east side of Kanab Creek into the area of the allotment. Non-game wildlife found on the allotment is typical of the area, including a variety of small mammals, grassland birds, raptors, and reptiles. All water sources within this arid area are important for wildlife.

Soil

The only soils monitoring data for this area is the Phase 1 Watershed Conservation and Development Inventory of 1971-1973 (See Field Office Files 7300). It was based upon a general soils map and thus ended up as broad interpretations and averages over large areas. Other more specific and detailed soils information is as follows:

SCS Soil Survey of Coconino County Area 629, Arizona, North Kaibab Part, 1991

4 Barx gravelly loam, 1 to 6 percent slopes, (fan terraces), mixed alluvium, Loamy Upland, 10 to 14 inches ppt
10 Curhollow-Mellenthin complex, 2 to 12 percent slopes, (fan terrace, hill) limestone, Shallow Loamy, 10 to 14 inches ppt
19 Jocity silty clay loam, 1 to 3 percent slopes, (stream terrace), mixed alluvium, Clayey Upland, 7 to 11 inches ppt
23 Klondike sandy clay loam, 2 to 15 percent slopes, (hills), sandstone, siltstone, shale, Shallow Loamy, 10 to 14 inches ppt
25 Mellenthin very gravelly loam, 1 to 25 percent slopes, (hills), limestone, Shallow Loamy, 10 to 14 inches ppt
46 Strych loam, 1 to 4 percent slopes, (fan terrace), limestone; Loamy Upland, 10" to 14"
48 Torriorthents-Rock Outcrop complex, (hills, walls), Breaks, 10" to 14"

Lithology: The Muggins allotment consists of alluvial fans and low ridges with outcrops of Moenkopi mudstones and gypsiferous shales. Silty and clayey soils form broad floodplains.

Cultural/Historical

Prehistoric and Historical sites exist throughout the allotment. Cultural resources cover the span of human occupation in the new world from around 10,000 years ago, up to and including the ranch operators of today. Our specific knowledge of the cultural makeup is limited due to the

lack of scientific investigation of the area.

Visual Resources

The allotment is in Visual Resource Management Class (VRM) Class III. VRM criteria are: management activities which affect the scenery should be designed or restricted so they are not obviously in contrast to the existing landscape.

Livestock Grazing

Muggins Flat allotment contains: 11,088 acres of federal land, 800 acres of state land, and 0 acres of private land. Total acreage is 11,888 acres. The total number of active AUMs on the allotment is 305, and the period of use is December 1 to March 31.

Recreation Resources

The allotment is considered to have recreation values for geology, scenic view sheds, remoteness and solitude. General recreation activities include: recreational OHV use, driving for pleasure, horseback riding, hiking, backpacking, camping, hunting, rock collecting, photography, bird watching and nature study.

Noxious Weeds

There is a patch of Scotch thistle at the northwest end of the allotment.

Socio/Economic

The economic base of the Arizona Strip is mainly ranching with a few gypsum/selenite mines and uranium operations. Nearby communities are supported by tourism (including outdoor recreation), construction and light industry. The social aspect involves remote, unpopulated settings with moderate to high opportunities for solitude.

The following critical elements of the human environment or resources are not affected by the proposed action or alternatives or are not present:

- Wilderness
- Wetlands/Riparian Areas
- Wild & Scenic Rivers
- Wild Horses and Burros
- Minerals
- Areas of Critical Environmental Concern (ACECs)
- Air Quality
- Native American Religious Concerns
- Wastes (hazardous or solid)

- Water (quality and quantity of surface/underground supplies)
- Prime or unique farmlands
- Floodplains
- Environmental Justice

IV. ENVIRONMENTAL IMPACTS

Only impacts that may result from implementing the proposed action or alternatives are described in this EA. If an ecological component is not discussed, it is because BLM resource specialists have considered effects to the component and found the proposed action or alternatives would have minimal or no effects.

General effects from projects similar to the proposed action or alternatives are also described in the documents to which this EA is tiered.

This EA incorporates by reference the Muggins Flat Allotment S&G Assessment and Appendices which provide complete discussions, analysis, and summaries of the range resources and associated data and issues.

Climate

The Proposed Action would have no effect on the climate. However, the Proposed Action would allow affected resources to respond to the climate with improvement to these resources, as mentioned below in the drought and vegetation segments.

In response to drought conditions, BLM can modify the terms and conditions of a grazing permit (i.e. number of cattle, turn out dates, removal dates, etc.) temporarily or on a more long-term basis. Most modifications are accomplished on a cooperative basis with the livestock permittee. However, if a permittee disagrees with BLM's assessment of the resource conditions or the necessary modifications, BLM may nevertheless issue a Full Force and Effect Grazing Decision to protect resources.

Vegetation

Grazing impacts on vegetation are mitigated by timing of use, adjusting of stocking rates, and conformance with Standards and Guidelines for Grazing Management. Under current management, the grazing system is designed to allow for different seasons of use and rest--allowing cool and warm season grasses and browse to elongate the plants apical bud, build vigor and achieve seed ripe.

Utilization data from 1985 to the present has been compiled for this evaluation. The objective is to obtain not more than an average of 50 percent utilization of the current year's growth of key species. The highest utilization level was 45 percent in 1988 and overall average utilization was ~17 percent.

Key areas are established on ecological sites and studied to determine the ecological status--defined as the extent to which the current kinds, proportions, and amounts of vegetation in a plant community are believed to resemble that of the potential natural community (PNC). Four ecological status classes are used to represent a percent similarity to the potential natural community:

Early Seral Stage (0-25 percent similar)
Mid Seral Stage (26 - 50 percent similar)
Late Seral Stage (51-75 percent similar)
Potential Natural Community (76 -100 percent)

The following table lists the allotment's pastures, key areas, current ecological status, and similarity to the potential natural community.

Pasture	Key Area	Ecological Status	Similarity to PN(
Muggins Well	#1	Mid Seral	38%
Johnson Reservoir	#1	Mid Seral	41%
Muggin Wash	#1	Mid Seral	33%
Muggins Wash	#2	Mid Seral	45%

Sagebrush is the principal vegetative type at the Muggins Flat allotment. The sagebrush type includes big sagebrush, squirrel tail, blue grama, galleta, sand dropseed, mormon tea and cliffrose. Desired Plant Community (DPC) objectives are predicated on the make up of a plant community at a given ecological site. Feasibility or capability to elicit change and current condition of vegetation are considerations when developing DPC objectives.

Trend of the vegetation at the 4 key areas is based on pace-frequency studies—which measure the ratio between the number of a given key species sampled and the total number of species sampled. Current trend is mostly not apparent, meaning it is neither up nor down. Cool season grasses fluctuate in frequency, but this is believed to be a normal response to wet and dry precipitation cycles.

A vegetation issue identified on the allotment was lack of understory vegetation in the sagebrush. Sagebrush reduction through use of prescribed fire or plowing-followed by drill seeding of site adapted species-could increase understory vegetation in the more productive sagebrush monoculture sites. In addition, use the herbicide Spike 20 P could release rudimentary stands of perennial grass from competition with dense sagebrush overstory, allowing perennial grasses to increase. For complete analysis and discussion of this issue refer to the Muggins Flat Allotment S&G Assessment pages 8, 15, and 21.

Noxious Weeds

The patch of Scotch thistle at the northwest end of the allotment has been treated and will continue to be treated as new thistle germinate and are found, as well as inventoried for new weeds.

Threatened or Endangered (T/E) Species

No listed, proposed, or candidate species would be adversely affected by implementation of the proposed action. Documentation of the effects determination and concurrence from the U.S. Fish and Wildlife Service is included in biological opinion AESO 02-21-88-F-127.

BLM Sensitive Species.

The Proposed Action would have no significant impact on BLM sensitive and state species of concern. These species include the avian species, Ferruginous hawk, Black-crowned Night Heron, and snowy egret and sensitive bat species such as Townsend's big eared, spotted bats, small-footed myotis, fringed myotis and big free-tailed bats. It is believed that livestock waters benefit these species.

Wildlife

The Proposed Action would have no significant impacts on big game or the other nongame wildlife found on the allotment. Observation and studies over time have indicated that this area receives only light use by mule deer, primarily as transitional habitat between summer and winter range. BLM studies show that dietary overlap between pronghorn antelope and cattle is approximately 15 percent on allotments with a poor perennial grass component. The allotment evaluation indicates that this is not the case for the Muggins Flat Allotment, suggesting that the level of dietary overlap between the two species is less than 15 percent. Since the ASFO has taken dietary overlap into account in making forage allocations for wildlife, sufficient forage would be available to pronghorn on this allotment in all but the most severe drought years. During those times, BLM and NRCS reduce numbers of livestock on an allotment, making additional forage available for wildlife.

Fences can impact pronghorn antelope. As they are maintained or replaced, identified non-compliant fences shall be brought into compliance.

Migratory Birds

Executive Order 13186 requires BLM and other federal agencies to work with the U.S. Fish and Wildlife Service to improve protection for migratory birds. Implementation of the proposed action is not likely to adversely affect any species of migratory bird known or suspected to occur on the allotment. No take of any such species is anticipated**.**

Soil

Attributes making up the soil resource should remain stable or improve thru implementation of the Proposed Action Alternative and enforcement of the Arizona Standards and Guides process for permitted livestock grazing within the allotment. The current grazing rotations and/or season of rest allows for plant rest and vigor. Utilization levels are within that allowable and current trends are mostly static. One soils issue identified on the allotment was moderate concerns about soil erosion. Erosive soils encompass a very small percentage of the allotment, and erosion is slight to stable over most of the allotment. For additional analysis and comment on this issue refer to the Muggins Flat Allotment S&G Assessment pages 8, 15, & 21.

Cultural Resources

There would be no significant impact to cultural or historical sites as a result of renewing this grazing permit. Cultural resources project file AZ BLM 010-2001-35 contains documentation of compliance with Section 106 of the National Historic Preservation Act. Great efforts are made to avoid these sites during allotment project implementation. Further, archaeological clearances are completed prior to all project approvals.

Visual Resources

The Visual Resource Management Class area inside the allotment remains essentially unchanged since the objectives were proposed in the Visual Resource Area Implementation Plan. A review as well as protection of the visual resource values is a routine part of the interdisciplinary NEPA process, along with recommendation for mitigating measures if impacts to visual resources are anticipated when surface disturbing projects are proposed.

Livestock Grazing

Under the Proposed Action livestock grazing would continue and the permittee would be allowed to continue in the livestock business.

Recreation Resources

Recreation in the area is primarily composed of driving for pleasure, recreational OHV use, horseback riding, hiking, backpacking, camping, hunting, photography and nature study. No impact to recreation is expected. A recreation issue identified on the allotment was OHV activity near the northeast key area. OHV users occasionally go cross country, which is in violation of agency management plans and OHV regulations and restrictions. More signing or law enforcement presence in the area may reduce the incidence of OHV violations. For a complete analysis and discussion of this issue refer to the Cowboy Butte Allotment S&G Assessment pages 8, 15, & 21.

Cumulative Impacts

Cumulative Impacts are tiered to the Arizona Strip RMP (1992), Environmental Consequences

pages IV-36 to IV-38, and to chapter 3 of the Vermillion Grazing EIS (1979) which was adopted into the RMP. Unavoidable Adverse Impacts, Relationship between Local Short-term Uses of Man's Environment, Maintenance and Enhancement of Long-term Productivity, and the Irreversible and Irretrievable Commitments of Resources were discussed.

Cumulative impacts occur when additional management facilities are added to those already present. Grazing plans are intended to meet specific objectives to the plan area and involve rangeland improvements that are designed to maintain or improve wildlife habitat, watershed, and overall resource conditions, thus improving ecosystem health.

Past, present, and reasonably foreseeable actions within the analysis area would continue to influence range resources, watershed conditions and trends. The impact of land treatments targeting woody species, voluntary livestock reductions during dry periods and implementation of a grazing system have improved range conditions. The net result has been greater species diversity, improved plant vigor, and increased ground cover from grasses and forbs. No cumulative impacts are predicted from the proposed action.

Residual Impacts

Residual Impacts are tiered to the Arizona Strip RMP (1992), Irreversible and Irretrievable Commitments of Resources page Chapter 7, Page 7-1 of the Vermillion Grazing EIS (1979) which was adopted into the RMP. Though the proposed action doesn't propose any new fences, it does allow for the existence of present fence lines, which do create some restrictions of free passage, but do not prevent passage of mule deer. Other wildlife using the area are not restricted by existing fences.

There are no residual impacts as a result of the proposed action to the vegetative resource. Future maintenance of existing vegetation treatments would take place regardless of the proposed action and would not affect additional acres beyond that done previously. Residual impacts from maintenance activities would be improved watershed conditions, wildlife habitat, and rangeland resources over time.

Monitoring

The monitoring addressed in the proposed action is sufficient to identify changes in vegetation as a result of livestock grazing activities. In addition to those methods described, there are efforts in place to inventory for noxious weed establishment, as well as monitor treated areas for treatment effectiveness. BLM weed specialist (LD Walker) has the lead on monitoring and treating noxious weeds on the Arizona Strip. He has provided training in identification and treatment as well as ways to reduce the spread of weeds to BLM employees and permittees.

Mitigation

When noxious weeds are located, various methods are used for their control depending on the

size of the infestation and growth stage of the plants. The methods include but are not limited to:

Physical or mechanical
Biological
Chemical or Cultural

If vegetative monitoring indicates current livestock grazing practices are causing non-attainment of resource objectives, BLM can modify the terms and conditions of a grazing permit (ie. number of cattle, turn out dates, removal dates, etc.) temporarily or on a more long-term basis. Most modifications are accomplished on a cooperative basis with the livestock permittee. However, if a permittee disagrees with BLM's assessment of the resource conditions or the necessary modifications, BLM may nevertheless issue a Full Force and Effect Grazing Decision to protect resources.

V. CONSULTATION AND COORDINATION

This EA was prepared by the Bureau of Land Management (BLM), Arizona Strip Field Office, 345 E. Riverside Drive, St. George, UT 84790. Phone (435) 688-3200. Public involvement for the Muggins Flat S&G evaluation began more than a year ago. The assessment was conducted by an interdisciplinary assessment team (IAT) of resource specialists from the BLM. The IAT was assisted by the Rangeland Resources Team (RRT) appointed by the Arizona Resource Advisory Council. A draft evaluation was sent out for public review and comment to Individuals, Groups and Agencies. Comments from Individuals, Groups and Agencies were incorporated in to the Final Muggins Flat S&G evaluation report. This EA reflects those comments.

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Ron Wadsworth, Supervisory Law Enforcement

Implementation of the Arizona Standards for Rangeland Health and Guidelines
for Grazing Management for the Muggins Flat Grazing Allotment Permit Renewal

RE: AZ-EA-110-2005-0071

FINDING OF NO SIGNIFICANT ENVIRONMENTAL IMPACT

The Environmental Assessment AZ-110-2005-0071, hereby incorporated by reference, analyzed a livestock grazing permit renewal action conducted under the Arizona BLM Standards for Rangeland Health and Guidelines for Grazing Management (S&Gs) where an intensive allotment evaluation was conducted with public and other agency involvement throughout the process. Analysis of existing study data indicates that overall Ecological Condition trends are static and pace frequency trends are mostly static on the allotment. The resource conditions on the allotment are meeting Standards for Rangeland Health. Issues were analyzed and it was determined that current management is not a factor in preventing attainment of Standards.

The Environmental Assessment reaffirmed the present Allotment Management Plan (AMP), and determined that the present grazing management program would continue to allow improvement to the health of public land resources, such as soil, water, vegetation, wildlife habitat, and wildlife and other resource values.

Based on the analysis of Environmental Assessment AZ-110-2005-0071, I have determined that the renewal of the Muggins Flat Livestock Grazing Permit with current terms and conditions will not have a significant effect on the human environment. Therefore, an environmental impact statement will not be prepared.

Field Manager
Arizona Strip Field Office

Date